WORLD INTELLECTUAL PROPERTY ORGANIZATION



International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:

C07K 14/00, 14/475, 16/18, A61K 38/18. 48/00, C12N 1/21, 15/16, 15/63, 15/18, C07H 21/04, C12P 19/34, 21/00, G01N

(11) International Publication Number:

WO 97/081

(43) International Publication Date:

6 March 1997 (06.03.9)

(21) International Application Number:

PCT/US96/14065

A1

(22) International Filing Date:

27 August 1996 (27.08.96)

(30) Priority Data:

08/519,777

28 August 1995 (28.08.95)

US

(60) Parent Application or Grant

(63) Related by Continuation US

08/519,777 (CIP)

Filed on

28 August 1995 (28.08.95)

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(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT. LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published

With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: NEURTURIN AND RELATED GROWTH FACTORS

(57) Abstract

A novel growth factor, neurturin, is disclosed and the human and mouse amino acid sequences are identified. Human and mouse neurturin genomic DNA sequences have been cloned and sequenced and the respective cDNA sequences identified. The subcloning into vectors and the preparation of cells stably transformed with the vectors are also disclosed. In addition, methods for treating degenerative conditions, tumor cells and obesity; methods for detecting gene alterations and methods for detecting and monitoring patient levels of neurturin are provided. Methods for identifying additional members of the neurturin-GDNF family of growth factors are also provided.